

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented): An apparatus for reinforcing at least a portion of an endocardial surface of a ventricle in a human heart, comprising:

a reinforcing element configured to have a first predetermined shape and a second predetermined shape, wherein the reinforcing element is configured to change from the first predetermined shape to the second predetermined shape while in a left or right ventricle of a human heart, wherein the first predetermined shape is configured to allow the reinforcing element to be moved through a human vasculature to the heart, wherein the second predetermined shape of the reinforcing element is configured to attach to a portion of the endocardial surface of the ventricle of the heart, and wherein the second predetermined shape is configured to reinforce at least a portion of an endocardial surface of a ventricle of the human heart during use such that the portion of the endocardial surface is inhibited from expanding while still allowing normal contraction and expansion during a cardiac cycle of the heart; and

an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation by a user after attaching the second predetermined shape of the reinforcing element to a portion of the endocardial surface of the ventricle of the heart, to change a dimension of at least a portion of the second predetermined shape of the reinforcing element upon positioning the reinforcement element in the ventricle such that the reinforcement element changes from a second predetermined shape to a third shape and to thereby change a dimension of at least a portion of the ventricle.

2. (Original): The apparatus of claim 1, wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the left or right ventricle.
3. (Cancelled)
4. (Cancelled)
5. (Original): The apparatus of claim 1, wherein a diameter of the second predetermined shape is larger than a diameter of the first predetermined shape.
6. (Original): The apparatus of claim 1, wherein the reinforcing element is configured to releasably attach to a portion of the endocardial surface of the heart.
7. (Cancelled)
8. (Previously presented): The apparatus of claim 1, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of at least a portion of the ventricle.
9. (Previously presented): The apparatus of claim 1, further comprising an engagement mechanism configured to inhibit the activated adjustment mechanism from moving.
10. (Original): The apparatus of claim 1, further comprising an activation mechanism, wherein the activation mechanism is configured to attach the reinforcing element to a portion of the endocardial surface of the heart.
11. (Original): The apparatus of claim 1, wherein the reinforcing element comprises a patch.

12. (Original): The apparatus of claim 1, wherein the second predetermined shape substantially emulates a shape and size of a portion of a left ventricle.
13. (Original): The apparatus of claim 1, wherein the reinforcing element comprises shape memory materials.
14. (Original): The apparatus of claim 1, wherein the reinforcing element comprises nitinol.
15. (Original): The apparatus of claim 1, wherein the portion of the endocardial surface comprises at least some scar tissue.
16. (Original): The apparatus of claim 1, wherein the reinforcing element comprises:
a plurality of conduits that form the first predetermined shape, the second predetermined shape, or the first predetermined shape and the second predetermined shape; and
at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configured to at least partially extend beyond a distal end of the corresponding conduit and to engage the portion of the endocardial surface when activated.
17. (Original): The apparatus of claim 16, wherein the plurality of conduits comprises variable length conduits.
18. (Original): The apparatus of claim 16, wherein at least one elongated member is configured to change shape upon extending beyond the corresponding conduit.
19. (Original): The apparatus of claim 16, wherein at least one elongated member is configured to change shape upon extending beyond the distal end of the corresponding conduit, and wherein the elongated member changes shape such that the elongated member extends away from a center axis of the reinforcing element.

20. (Original): The apparatus of claim 16, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other.

21. (Original): The apparatus of claim 16, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other, and wherein the support elements are configured to inhibit the reinforcing element from expanding beyond the second predetermined shape during use.

22. (Original): The apparatus of claim 16, wherein at least two of the conduits radiate from a center region.

23. (Original): The apparatus of claim 22, wherein the center region functions as a coupling region for two or more of the conduits.

24. (Original): The apparatus of claim 22, wherein the center region comprises an opening configured to allow at least a guidewire to pass through the center region, and wherein the guidewire is configured to facilitate positioning of the reinforcing element on the endocardial surface.

25. (Original): The apparatus of claim 22, wherein the center region comprises a structure with an opening, wherein the opening is configured to allow a guidewire to pass through it.

26. (Original): The apparatus of claim 22, further comprising a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart.

27. (Original): The apparatus of claim 22, further comprising a guidewire positionable in a flexible conduit, wherein the guidewire is configured to extend beyond a distal end of

the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart.

28. (Previously presented): An apparatus for reinforcing at least a portion of a human heart, comprising a reinforcing element having a first predetermined shape and second predetermined shape, wherein the reinforcing element is configured to attach to a portion of an endocardial surface of the heart to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the heart, while still allowing normal contraction and expansion of the heart during a cardiac cycle, and wherein the reinforcing element comprises:

- a plurality of conduits that form the first predetermined shape, the second predetermined shape, or the first predetermined shape and the second predetermined shape; and

- at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configured to at least partially extend beyond a distal end of the corresponding conduit and to engage the portion of the endocardial surface when activated.

29-52 (Cancelled)

53. (Previously presented): An apparatus for reinforcing at least a portion of a human heart, comprising:

- a reinforcing element having a predetermined shape, wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the heart during use, while still allowing normal contraction and expansion of the heart during a cardiac cycle, and wherein the reinforcing element comprises:

- a plurality of conduits that form the predetermined shape during use; and

- at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configured to at least

partially extend beyond a distal end of the corresponding conduit when activated to engage the portion of the endocardial surface.

54-74 (Cancelled)

75. (Previously presented): A system for reinforcing at least a portion of a human heart, comprising:

- a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart;

- a guidewire positionable in the flexible conduit, wherein the guidewire is configured to extend beyond the distal end of the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart; and

- a reinforcing element comprising a first predetermined shape positionable in the flexible conduit, wherein the reinforcing element is configured to change to a second predetermined shape and attach to a portion of the endocardial surface of a left or right ventricle of the heart, and wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle, while still allowing normal contraction and expansion of the heart during a cardiac cycle.

76-96 (Cancelled)

97. (Withdrawn): A method for reinforcing at least a portion of an endocardial surface of a human heart, comprising:

- accessing an interior of a left or right ventricle of the human heart;

- positioning a reinforcing element on at least a portion of the endocardial surface of the ventricle;

- attaching the reinforcing element to a portion of the endocardial surface such that expansion of an average of an endocardial surface over a cardiac cycle is inhibited; and

adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism such that a dimension of at least a portion of the ventricle is changed.

98-115 (Cancelled)

116. (Withdrawn): A method of reinforcing at least a portion of a ventricle of a human heart, comprising:

attaching a reinforcing element to a region of an endocardial surface of the ventricle subsequent to a cardiovascular event prior to substantial ventricular deformation, wherein the reinforcing element is attached such that at least a portion of a natural contour of the region is maintained; and

extending one or more elongated members of the reinforcing element beyond a distal end of one or more conduits of the reinforcing element to releasably attach the reinforcing element to a portion of the endocardial surface such that deformation of the portion of the endocardial surface is inhibited.

117-139 (Cancelled)

140. (Previously presented): The apparatus of claim 1, wherein the third shape is similar to a shape and size of at least a portion of an appropriate left ventricle.